Domain

| DEFINITION	
Name	Interoperability Domain
Description	Interoperability is defined as the ability to transfer and use information in a uniform and efficient manner across branches of government, agencies and disparate information technology systems. Interoperability is fundamental to the benefits gained by the State of Missouri enterprise, other government entities, and the wider economy through the sharing of data. The Interoperability Domain defines the recommendations, policies, standards, and technologies that allow software systems to freely interact within the enterprise. Interoperability Architecture defines the techniques that disparate business systems use to seamlessly communicate and transfer data.
Rationale	Interoperability is concerned with the "dialog" within or between Missouri agencies and external entities including other states, the Federal government, the private sector and public sector. When these entities communicate with each other, they must do so in a commonly understood language.
Benefits	• Improve communications and better enable information sharing between state of Missouri agencies and entities outside Missouri state government. • Improved efficiencies in the development of information sharing projects. • Saves time and resources by having established procedures readily available for data exchange (eliminates uncertainty in data formats and exchange mechanisms). • Provides enhanced communications of services and information to the public through better inter-agency communications.

BOUNDARY

Boundary Limit Statement	Defines those technologies, standards and products related to providing a common interface that allows inter-agency communications between disparate environments. Interoperability is not data consolidation or data warehousing. Functional Integration is not considered part of this domain as it should be explored and defined through the development of the State of Missouri Enterprise Business Architecture. The following diagram illustrates the Disciplines associated with the Interoperability and establishes the high-level boundary: Interoperability Domain Data-Exchange Discipline Application Interoperability Discipline
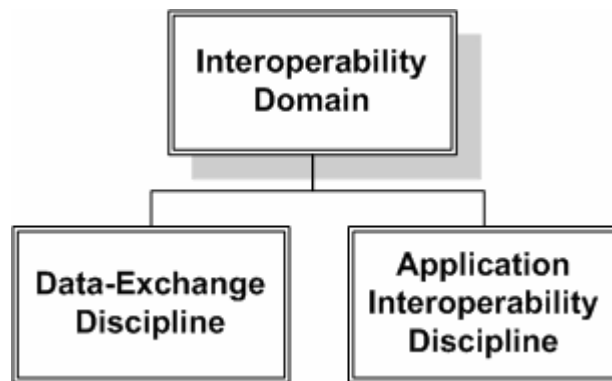
ASSOCIATED DISCIPLINES

List Disciplines under this Domain.	Data Exchange Discipline; Application Interoperability Discipline;

PRINCIPLES
Related Enterprise Principles

Principle	Conflict	Relationship
GP1 – IT is an Enterprise-wide resource.	☐	
GP2 – IT systems and Enterprise Architecture will support the State's long-term business, strategies, and plans.	☐	
GP3 – Enterprise Architecture represents a target IT environment.	☐	
GP4 – All State Info Systems will comply with the Enterprise Architecture.	☐	
GP5 – Enterprise Architecture is adaptive and must evolve to accommodate changes in business and technology.	☐	
GP6 – The CIO and ITAB will provide leadership to the State on the use of technologies to encourage business innovations.	☐	
MP1 – Accountability will be established for all IT assets.	☐	
MP2 – State agencies will implement an organizational structure that supports architecture.	☐	
TP1 – Agencies will develop and implement technology solutions based upon industry standards in compliance with the Enterprise Architecture.	☐	

	Conflict	Relationship
TP2 – State agencies will actively seek opportunities to share and re-use IT assets.	☐	
TP3 – The State will use a standard set of proven technologies.	☐	
ADP1 – A business process analysis and review must always accompany automation efforts.	☐	
ADP2 – The order of preference for a solution should be based on reusable components.	☐	
ADP3 – Applications programs will be architected with separation of presentation logic, business logic, and data access.	☐	
ADP4 – New applications will use defined and documented standards-based programming interfaces.	☐	
UI1 – User interfaces will be consistent, intuitive, and support multiple access delivery channels.	☐	
SP1 – The integrity, confidentiality, and security of state systems and data will be protected.	☐	
SMP1 – Technology selection will consider the ability to support centralized systems management of all technology components.	☐	
DMP1 – Data is an enterprise-wide resource.	☐	
DMP2 – The State will promote the use of electronic data capture and encourage the use of electronic service delivery.	☐	
DMP3 – The State will make timely, accurate, and complete data available to our stakeholders.	☐	

BEST PRACTICES
Related Best Practices

Best Practice	Conflict	Relationship
BP1 – Enterprise architecture must be an in-sourced effort.	☐	
BP2 – The developer's roles must be partitioned to facilitate layered application development..	☐	
BP3 – IT resources should be focused on the agency's mission.	☐	
BP4 – Application systems must be "significantly layered" and "loosely coupled".	☐	
BP5 – Applications systems should be designed using an n-tier model.	☐	
BP6 – Data Warehouse technologies should be leveraged to accelerate decision-making and reduce the development burden.	☐	
BP7 – As end users become more knowledgeable about how to analyze and access information, the interfaces across separate logical boundaries must be message-based and extend to all stakeholders to include citizens, employees and vendors.	☐	
BP8 –The State must implement an enterprise wide backbone network that provides a "single network image" as if it were a virtual, enterprise wide LAN.	☐	
BP9 – Application systems should be event-driven.	☐	
BP10 –- Databases should have a high degree of physical partitioning.	☐	
BP11 – On-line transaction processing (OLTP) should be separated from Data Warehouse and other end-user computing.	☐	

	Conflict	Relationship
BP12 -- A comprehensive "information architecture" that encompasses the entire "work architecture" (e.g., process models, "events", transaction data, state descriptions) should evolve.	☐	
BP13 – Data redundancy will be documented and managed effectively.	☐	
BP14 – Metadata should be documented in such a way as to allow an authorized user to make use of the data in end-user query and decision-support tools.	☐	
BP15 – The state will use a standard set of proven technologies; the proliferation of technologies will be avoided.	☐	
BP16 – Technology selection will consider, in addition to functionality, the ability to support systems management disciplines that are oriented toward centralized management of all technology components.	☐	
BP17 – New applications will be modular and independent (autonomous) in nature. They will access common data, use common services and have only inherently essential dependence on other applications (e.g. for provision of up-to-date data).	☐	
BP18 – Logical boundaries must be established between the partitions, applications or database, and the logical boundaries must not be violated.	☐	

TECHNOLOGY TRENDS

Related Technology Trends

Technology Trends	Conflict	Relationship
TT1 – A severe shortage of qualified IT professionals is resulting in stiff market competition.	☐	
TT2 – The performance of computer hardware will continue to grow exponentially, while costs continue to decline dramatically (Moore's Law.)	☐	
TT3 – Networking performance and capacity continue to increase rapidly.	☐	
TT4 –The increasing failure of traditional software development methods is producing fundamentally new techniques for the execution of IT projects.	☐	
TT5 – The Internet will drive the technical standards for network computing.	☐	
TT6 – Microsoft and Intel will continue to strongly influence business computing.	☐	
TT7 – Organizations are moving towards the total digitization of all forms of corporate data and the creation of enterprise-wide data warehouses.	☐	
TT8 – "Intelligence-oriented" technologies are becoming increasingly available from commercial vendors.	☐	
TT9 – Enterprises are using new technologies to reduce administration costs and establish a unified system management approach for corporate computing.	☐	
TT10 – Unified management and governed evolution of the Enterprise Architecture will become a dominant best practice even where asset ownership is federated. Federated architectures will focus on supporting common business infrastructure initiatives across semi-autonomous business units.	☐	

STATE CONTRACTS

Planned Contracts	
Existing Contracts	

CURRENT STATUS

Provide the Current Status	☐ *In Development*	☐ *Under Review*	☒ *Approved*	☐ *Rejected*

AUDIT TRAIL

Creation Date	11/5/2003	*Date Approved/Rejected*	4/13/04
Reason for Rejection			
Last Date Reviewed		*Last Date Updated*	
Reason for Update			